BRUHATH BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE ELECTRICAL DIVISION

Name of the work :- Detaild estimate for Annual Maintenance and Repairs of Electrical Installations to BBMP buildings coming under yelahanka Constituency.

Est Cost Rs. 600000.00

Sl. No	SR Page No	Description	Unit	Qty	Rate	Amount
1	Labour Dept	Licenced electricial wiremen with tools (Skilled) Rs.625.17/Days KAE 31 LMW 2017 Dated 30-12-2017 Minium Wages and VDA From 01-04-2022 to 31-03-2023	Days	200	625.17	125034.00
2	Labour Dept	Assistant wiremen (semiSkilled) Rs576.14/Days KAE 31 LMW 2017 Dated 30-12-2017 Minium Wages and VDA From 01-04-2022 to 31-03-2023	Days	200	556.53	111306.00
3	6/3.14.1	Supplying and fixing/replacing of 6/16/32Amps electrical accessories on existing switch board.6Amps SP Switch	No	60	43.00	2580.00
4	6/3.14.3	Supplying and fixing/replacing of 6/16/32Amps electrical accessories on existing switch board.6Amps 3 way 5 pin Socket	No	20	65.00	1300.00
5	6/3.14.4	Supplying and fixing/replacing of 6/16/32Amps electrical accessories on existing switch board.6Amps 3 pin Top	No	10	52.00	520.00
6	6/3.14.7	Supplying and fixing/replacing of 6/16/32Amps electrical accessories on existing switch board.6 Amps bell push	No	10	59.00	590.00
7	6/3.14.9	Supplying and fixing/replacing of 6/16/32Amps electrical accessories on existing switch board.16 Amps SP switch	No	15	106.00	1590.00
8	6/3.14.11	Supplying and fixing/replacing of 6/16/32Amps electrical accessories on existing switch board.16 Amps 3 way 5 pin socket	No	15	113.00	1695.00
9	6/3.14.12	Supplying and fixing/replacing of 6/16/32Amps electrical accessories on existing switch board.16 Amps 3 pin top	No	10	97.00	970.00
10	6/3.14.13	Supplying and fixing/replacing of 6/16/32Amps electrical accessories on existing switch board.32 Amps Bakelite DP	No	15	200.00	3000.00
11	6/3.14.14	Supplying and fixing/replacing of 6/16/32Amps electrical accessories on existing switch board.16/6 Amps combined plug and socket with control switch	No	15	281.00	4215.00
12	6/3.14.15	Supplying and fixing/replacing of 6/16/32Amps electrical accessories on existing switch board.Electronic stepped regulator.	No	20	221.00	4420.00
13	**2/1.8.1**	Supplying and fixing of PVC casing and capping on the wall or ceiling using necessary materials like bends, junction box, elbows, screws at an interval of 300mm .... etc. as required.20mm	m	80	27.00	2160.00
14	**2/1.8.2**	Supplying and fixing of PVC casing and capping on the wall or ceiling using necessary materials like bends, junction box, elbows, screws at an interval of 300mm .... etc. as required.25mm	m	80	28.00	2240.00

15	5/3.3.1	Supplying and fixing surface/flush mounting unbreakable PVC modular box suitable for mounting modular switch plates with due groove cutting in Brick/C.C wall, including necessary rawl plugs, Machine/NF screws etc., complete.1-3Way	Each	5	91.00	455.00
16	5/3.3.2	Supplying and fixing surface/flush mounting unbreakable PVC modular box suitable for mounting modular switch plates with due groove cutting in Brick/C.C wall, including necessary rawl plugs, Machine/NF screws etc., complete.4-5Way	Each	5	122.00	610.00
17	5/3.3.3	Supplying and fixing surface/flush mounting unbreakable PVC modular box suitable for mounting modular switch plates with due groove cutting in Brick/C.C wall, including necessary rawl plugs, Machine/NF screws etc., complete.6Way	Each	5	149.00	745.00
18	5/3.5.1	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box.1 to 3 Module	Each	5	152.00	760.00
19	5/3.5.2	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box.4 Module	Each	5	175.00	875.00
20	5/3.5.3	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box.6 Module	Each	5	244.00	1220.00
21	5/3.6.1	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.6Amps one way Switch	Each	15	88.00	1320.00
22	5/3.6.3	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.6Amps one way Switch 6Amps 3way socket	Each	17	162.00	2754.00
23	5/3.6.4	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.6Amps one way Switch Stepped Fan Regulator	Each	10	313.00	3130.00
24	5/3.6.8	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.16Amps one way switch	Each	15	249.00	3735.00
25	5/3.6.11	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.6/16Amps universal socket	Each	10	249.00	2490.00
26	6/3.8	Supplying 4mm thick plastic sheet with necessary nitches for fixing switches, regulators etc., and fixing on existing wooden or metal box using N.F. screws.	cm^2	2000	0.29	580.00

27	10/5.1	Supplying push button operated direct online starter with an antiweld silver cadmium oxide contactor with replaceable fixed and moving contacts and bimetallic thermal overload relay help in anticorrosion treated sheet steel or iron clad enclosure and fixing the same to suitable capacity wires for 230/440 volts 1/3 phase motor upto 5 HP.	Each	1	1490.00	1490.00
28	11/5.8.2	Supplying of Switch disconnector fuse unit (TPN) HRC type (but without HRC fuses). With AC-23A duty and as per IS- 13947.100 Amps	Each	1	5184.00	5184.00
29	11/5.8.4	Supplying of Switch disconnector fuse unit (TPN) HRC type (but without HRC fuses). With AC-23A duty and as per IS- 13947.160 Amps	Each	1	5940.00	5940.00
30	11/5.9.3	Supplying and fixing HRC fuse units base on existing switch/ panel board.100 to 300 Amps	Each	2	459.00	918.00
31	12/5.13.6	Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947.160 Amps	Each	1	14220.00	14220.00
32	13/5.17.1	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.6-32Amps SP	Each	4	523.00	2092.00
33	13/5.17.4	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.6-32 Amps DP	Each	5	1103.00	5515.00
34	13/5.17.8	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.40 Amps TPN	Each	5	2393.00	11965.00
35	14/5.29	Supplying, fixing and wiring 3 Phase Digital Ammeter / Voltmeter.	Each	5	1280.00	6400.00
36	14/5.32	Supplying and fixing digital frequency meter with latest micro controller technology, ultra bright 4 digit LED display, from 30-500V AC and optional or relay output for high/low frequency and wiring complete.	Each	1	875.00	875.00
37	14/5.38	Supplying and fixing of LED type panel board indicating lamp with required colour suitable for 230/440v A.C. 50 Hz 12/24v D.C.	Each	6	464.00	2784.00
38	9/31.05 BESCO M CSR	Laying of cable in Existing Trench/GI pipe/Stone Ware/RCC Hume pipe using Wooden/Aluminum Rollers as directed by the departmental staff 2.5 to 25 Sqmm LT cable	Km	0.100	16159.00	1615.90
39	22/6.3.1	Supplying capacitor type ceiling fan complete with down rod blades, shackle, canopies etc., for operation on 230 volts, 50 cycles. Single phase AC supply conforming to ISS-374- 1979 and with double ball bearing system.48" Sweep (1200mm) Regular model	Each	4	2085.00	8340.00

40	23/6.5.2	Supplying wall mounting fan suitable to operate at single- phase 230v A.C. supply.400mm Sweep	Each	4	2838.00	11352.00
41	30/9.5.8	Supplying, installation, testing & commissioning of 12V DC, AH batteries in poly propylene container for U.P.S. Sealed maintenance free batteries.120 AH capacity	Each	1	15783.00	15783.00
42	34/11.3.2	Supplying of .....feet - PVC Batten with integrated LED tube .....W with high quality diffuser with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V @ 50/60Hz & Power factor >0.9 along with CE approved. 2 years Warranty against any manufacturing defect working under standard electrical condition.LED light fighting 1 x4'- 20/22 w	Each	25	740.00	18500.00
43	34/11.4.3	Supplying of recess mounting non integrated type LED down light ..... W luminaire comprising of pressure decast/ extruded aluminium housing, with spring loaded false ceiling clamps, LED of Power/COB with CCT 6500 degree K, CRI> 70%. efficacy >100 lumen per watt, 120degree beam spread, life> 25000 burning hours and Compliance to IS 10322/IEC 60598, LM 79 & LM 80. The lamp compartment is enclosed with anti glare opal diffuser which enhances the lighting level. LEDs are driven by HF electronic driver integrated in a separate control gear assembly., with PF > 0.95, power loss should < 5% of lamp wattage., short circuit & open circuit protection to be integrated in the circuit, THD less than 20%, Life as per LM 79. The operating input voltage should be between 130 to 275 volts. BIS Approved and Tested by NABL/CPRI accredited laboratory with 2 years Warranty against any manufacturing defect working under standard electrical condition.15-18W	Each	10	2174.00	21740.00
44	34/11.5.3	Supply of round/square recess/surface mounted rolling type LED Down light with .....W GU 10 LED Lamp Rib Fabricated from Die cast aluminium with white powder coated prewired to mains connector & has swiveling unit of aluminium die cast eye ball & LED Lamp position retained by circular wire spring, with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V @ 50/60Hz & Power factor >0.9 along with CE approved. 2 years Warranty against any manufacturing defect working under standard electrical condition LED square or round down light 15-18W	Each	20	1249.00	24980.00
45	38/12.1	Supplying and fixing one of 230 volts bell or buzzer and a flush type bell push with gang box fixed on necessary wooden or rawl plugs using NF screws.	Each	4	175.00	700.00
46	39/12.2.2	Supplying and fixing one of 230 volts Ding dong bell and a flush type bell push with gang box fixed on necessary wooden or rawl plugs using NF screws with Musical	Each	3	422.00	1266.00

47	39/12.2.3	Supplying and fixing one of 230 volts Ding dong bell and a flush type bell push with gang box fixed on necessary wooden or rawl plugs using NF screws with Remote.Remote	Each	4	1115.00	4460.00
48	39/12.3.2	Supplying and fixing/replacing condenser for ceiling fan/MV/ SV/MH and other luminaries.8mfd	Each	20	158.00	3160.00
49	39/12.4.3	Rewinding a ... mm ceiling fan/after using necessary gauge annealed and insulated copper wire with necessary insulating, separators vibration arresting shellac,etc including replacement of bearings if any transportation to and from the spot to workshop inclusive of releasing the refixing.1200MM	Each	10	751.00	7510.00
50	40/12.2.0	Supplying and fixing of T8 36/40W Fluorescent Tube with 36W power consumption with initial lumen of 2750 (3000 deg K / 4000 deg K) with rated avg life of greater than 10000 hrs.Operating voltage range from 180V to 265V. 50Hz AC power Supply	No	80	59.00	4720.00
51	41/12.23	Supplying and fixing of 20/40 Watts heavy duty open construction Ferromagnetic copper ballast for fluorescent tubes : Supplying and fixing of 20/40 Watts heavy duty open construction Ferromagnetic copper ballast for fluorescent tubes, Class H Insulated copper wire, Vacuum impregnated high quality with Low loss silicon steel lamination operated on 240V,50Hz supply with IEC 60920 (Safety) & IEC 60921(Performance). Operating voltage range from 180V to 265V, 50Hz AC power Supply.	No	20	300.00	6000.00
52	43/12.44	Supplying & Fixing of 230 Volts 20/40 watts starter for Fluorescent Lamp	No	60	26.00	1560.00
53	43/12.45	Supplying & Fixing of 230 Volts 20/40 watts Fluorescent Lamp holder	No	25	17.00	425.00
54	43/12.51.3	Supplying & fixing LED Drivers suitable for 5700K LED fitting Indoor Fixtures. Operating voltage range from 180V to 265V, 50Hz AC power Supply 9W to 12W 5700K suitable for indoor LED fitting.	Each	10	315.00	3150.00
55	43/12.51.4	Supplying & fixing LED Drivers suitable for 5700K LED fitting Indoor Fixtures. Operating voltage range from 180V to 265V, 50Hz AC power Supply 15W to 18W 5700K suitable for indoor LED fitting.	Each	10	640.00	6400.00
56	45/13.7.1	Fixing all types and all capacities of fluorescent / false ceiling / spot light / CFL / LED fittings indoor on the wall / ceiling / rafters / girders using 23/0.0076" twin twisted PVC insulated wires, required Nos of round blocks and clamps.On wall / ceiling / Rafter / Girders	Each	50	119.00	5950.00
57	46/13.10	Fixing a ceiling / Wall mounting fan of all capacities and all types to the existing 'S' hook with fan regulator to the existing board together with supplying and fixing 5 amps. ceiling rose, necessary length of 23 / 0.0076 inch PVC insulated twin twisted copper wire and wiring.	Each	5	162.00	810.00

58	46/13.11	Fixing a ceiling / wall mounting fan of all capacities and all types, with necessary clamps and 'S' hook made out of 15mm dia MS rod, with 5 amps. ceiling rose of approved quality with necessary length of 23 / 0.0076 inch PVC insulated twin twisted wire of approved quality, mounted on a suitable size wooden board and wired.	Each	4	281.00	1124.00
59	46/13.16	Erection of single phase preventer / ammeters / including fixing selector switch / voltmeter / current operated earth leakage circuit breakers / voltage operated circuit breaker / above 100A fuse channel set (3 Nos) HRC fuses above 100A (3 Nos.) / Digital ammeter/digital volt meter/set of 3 indicating lamps /MCB / Relays /A-V selector switches including wiring using suitable capacity wires, bolts, nuts, screws.	Each	5	162.00	810.00
		Total Rs				**488032.90**
60	9/32.08 BESCOM CSR	Supplying of1.1 kV, XLPE or Heat resistant PVC insulated, PVC exutruted Inner Seath Armoured LTUG Cable as per IS-1554 (Part- 1) or IS-7098 Part-1, Armouring strip thickness and resistivity as per IS-3975 25 Sqmm, 4 Core, (13 GI Strips - 4 x 0.8 mm)	KM	0.100	240813.00	24081.30
		Total Rs				**512114.20**
		GST 18 % on Item 1 to 59		488032.90		**87845.92**
		Misscelleneous charges				**39.88**
		TOTAL				**600000.00**

CERTIFICATE

1. The Place was inspected and work is essential.
2. The Provision made in the estimate is adequate and are necessary.
3. The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.
4. The rates in the Estimate is based on PWD(Elec) SR of 2022-23.

Asst. Engineer (Elec)

Asst. Exe.Engineer (Elec)
Sub-Division No.
Bruhat Bangalore Mahanagara Palike

EXECUTIVE ENGINEER (ELEC)
YELAHANKA DIVISION
BRUHAT BANGALORE MAHANAGARA PALIKE

Administrative Sanction for Rs. Six Lakh only
is accorded under head P-0.29.4
Registered as EE No. 11/22-23 Subject to conditions contained in enclosed memo No. 11/22-23 28/12/22

Executive Engineer

TECHNICALLY SANCTIONED FOR Rs. Six Lakhs only
Rupees Six Lakhs only
Under P-0.29.4
Registered as EE ( ) No. 9 9
Subject to conditions contained in enclosed memo EE ( ) No. 07/22-23
Dt. 28/12/22 Estimate A/ Sanctioned
No. 07/22-23
Dated 28/12/22 Rs. Six Lakhs

Executive Engineer